

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

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| In the Matter of:                        | ) |                     |
|  | ) |                     |
| Digital Output Protection Technology and | ) |                     |
| Recording method Certifications          | ) |                     |
|  | ) |                     |
| MagicGate Type-R for Secure Video        | ) | MB Docket No. 04-55 |
| Recording for Hi-MD Hardware             | ) |                     |
|  | ) |                     |
| MagicGate Type-R for Secure Video        | ) | MB Docket No. 04-56 |
| Recording for Memory Stick PRO Software  | ) |                     |
|  | ) |                     |
| MagicGate Type-R for Secure Video        | ) | MB Docket No. 04-57 |
| Recording for Hi-MD Software             | ) |                     |
|  | ) |                     |
| MagicGate Type-R for Secure Video        | ) | MB Docket No. 04-58 |
| Recording for Memory Stick PRO           | ) |                     |
| Hardware                                 | ) |                     |

**REPLY COMMENTS OF SONY CORPORATION**

Sony Corporation (“Sony”), pursuant to the Public Notice issued by the Federal Communications Commission (“FCC” or “Commission”) on March 17, 2004, the regulations set forth at 47 C.F.R. § 73.9008, and in support of the above-captioned certifications, hereby submits replies to the comments concerning the above-captioned dockets for the certifications for the MagicGate Type-R for Secure Video Recording for Hi-MD (“MG-R(SVR) for Hi-MD”) and MagicGate Type-R for Secure Video Recording for Memory Stick PRO (“MG-R(SVR) for Memory Stick PRO”) technologies for the secure recording of Unscreened and Marked digital terrestrial broadcast (“DTV”) content (the “MG-R(SVR) Certifications”).

**I. REPLY TO COMMENTS OF MPAA**

Sony appreciates the support for the MG-R(SVR) Certifications expressed in the comments of the Motion Picture Association of America, Inc., Metro-Goldwyn-Mayer Studios Inc., Paramount Pictures Corporation, Sony Pictures Entertainment Inc., Twentieth Century Fox Film Corporation,

Universal City Studios LLLP, The Walt Disney Company, and Warner Bros. Entertainment Inc. (the “MPAA Comments”), including the view of the MPAA that MG-R(SVR) for Hi-MD and MG-R(SVR) for Memory Stick PRO adequately protects Marked and Unscreened Content against unauthorized redistribution.<sup>1</sup> Sony is pleased to respond below to the clarifications sought in the MPAA Comments.

**A. MG-R(SVR) Controls Over HDCP Outputs**

The MPAA Comments request that Sony require “adopters manufacturing a Covered Demodulator product to ensure that it asserts [the HDCP] upstream control function.”<sup>2</sup> The MPAA Comments explain that such a requirement is necessary “because the HDCP function can not assert control over the output of (or prevent the delivery of) Marked and Unscreened Content to an HDCP device, but can only signal upstream to the MagicGate content protection technology when the HDCP function is actively engaged and able to deliver protected content.”<sup>3</sup> The MPAA Comments also include sample language offered by the MPAA as a means to accomplish the above.

Sony recognizes the unique nature of HDCP and the desirability of having the MG-R(SVR) Compliance Rules address the concept of “upstream control” of the HDCP function. Sony believes, however, that the MPAA Comments have inadvertently confused (a) obligations that should be proposed to the FCC as “associated obligations” to be imposed by the Broadcast Flag regulation as a condition of use of HDCP outputs on Covered Demodulator Products and (b) obligations that should be imposed in the MG-R(SVR) Compliance Rules with respect to MG-R(SVR) “Licensed Products.” The sample language included in the MPAA Comments imposes obligations on “Covered Demodulator Products” with respect to the output of “Marked or Unscreened Content” to HDCP outputs. As such, it should appropriately be viewed in the first category (i.e., as possible language for “associated obligations” with which Covered Demodulator Products must comply under §§

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<sup>1</sup> MPAA Comments at 2-3.

<sup>2</sup> MPAA Comments at 4.

<sup>3</sup> *Id.*

73.9003(3) and 73.9004(3)). Such language, as drafted, would not be appropriate for the MG-R(SVR) Compliance Rules.

That said, as noted above, Sony acknowledges the underlying concept that MG-R(SVR) products should look to the signal sent by the HDCP source function and assert control, based on that signal, as to whether MG-R(SVR) protected content may be passed to the HDCP output. Accordingly, Sony included such a requirement in the MG-R(SVR) Compliance Rules as filed with the Commission in the MG-R(SVR) Certifications. Specifically, a Licensed Product may pass Decrypted SVR Data to an HDCP output only if it confirms “from the information provided by the HDCP Source Function that such HDCP Source Function is fully engaged and able to deliver Decrypted SVR Data in protected form in accordance with the specification and license agreement for HDCP.”<sup>4</sup> The HDCP Compliance Rules, in turn, require that the HDCP Source Function convey such information to an upstream technology such as MG-R(SVR) only if “(a) HDCP encryption is operational on all applicable DVI or HDMI outputs, (b) there are no HDCP Display Devices or Repeaters on a DVI output whose KSV is in the current revocation list, and (c) processing of valid received SRMs, if any, has occurred, as defined in the Specification.”<sup>5</sup> In other words, the MG-R(SVR) Compliance Rules require that a Licensed Product must look for a “green light” from the HDCP source function before it can pass Decrypted SVR Data to the HDCP output, and the HDCP Compliance Rules require that a green light be signaled only if the above conditions have been met (including the conditions regarding revocation).

Sony believes that the language included in the MG-R(SVR) Compliance Rules addresses the MPAA concerns and more appropriately reflects the MPAA intent than does the sample language proposed in the MPAA Comments. If, however, the MPAA believes that the language in the MG-R(SVR) Compliance Rules fails in some way to capture the substance of the MPAA concern, Sony would be pleased to work with any interested persons to discuss and, if necessary, refine the

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<sup>4</sup> See Section 3.3.1(ii) of MG-R(SVR) Compliance Rules.

<sup>5</sup> See Section 4.2 of Exhibit C to the HDCP License Agreement, MB Docket No. 04-61.

language as appropriate.

**B. Clarifications Regarding Content Providers, Broadcasters and Consumers**

The MPAA Comments request that Sony clarify that broadcasters, content providers and others who “mark or broadcast content with a Broadcast Flag that triggers MagicGate technology” are not subject to any obligations to Sony or its affiliates. The MPAA Comments also seek clarification that “no consumer transmitting or receiving content marked with the Broadcast Flag signal will incur any claim of obligation from Sony or its affiliates.” Sony hereby clarifies that broadcasters, content providers and others who do not execute the Content Participant Agreement but who mark or broadcast Unencrypted Digital Terrestrial Broadcast Content (as defined in § 73.9000) with a Broadcast Flag, and consumers transmitting or receiving such content, are not subject to any obligations to Sony or its Subsidiaries (as defined in the Content Participant Agreement) with respect to the MG-R(SVR) technology that would arise solely by reason of the fact that the Broadcast Flag is triggering the MG-R(SVR) technology.

**C. Robustness Rules Apply to Both Software and Hardware Implementations**

Sony confirms, in response to the request for clarification in the MPAA Comments, that the Robustness Rules apply to both hardware and software implementations of MG-R(SVR). Hardware implementations of MG-R(SVR) are required to comply with the Robustness Rules attached to the Hardware Adopter Agreement. Such obligations are set forth in Article 2 of the MG-R(SVR) for Memory Stick PRO Hardware Adopter Agreement (for implementations of MG-R(SVR) for Memory Stick PRO) and in Article 2 of the Hi-MD Basic CP Agreement and the Hi-MD Video Addendum (for implementations of MG-R(SVR) for Hi-MD), in each case which provisions require that “Licensed Products” comply with the Robustness Rules (in addition to the Compliance Rules and specifications). Software implementations are required, under Section 12.1 of the Content Participant Agreement for Hi-MD and Memory Stick PRO, to comply with the Robustness Rules in effect under the Hardware Adopter Agreements. The Robustness Rules are set forth in Exhibit D to the Memory Stick PRO

Hardware Adopter Agreement and to the Hi-MD Basic CP Agreement, respectively.

**D. Revocation of 300MB Hi-MD Recorder Devices and Software**

The MPAA Comments seek clarification with respect to the process of revocation in 300MB Hi-MD products.<sup>6</sup> All MG-R(SVR) for Hi-MD products (hardware and software) must comply with the MG-R(SVR) specifications, which require that such products are capable of being revoked. The revocation process as described in the specifications is the same for both Hi-MD 1GB and Hi-MD 300MB, including with respect to the method of propagation and usage of EKB files, and is described in the technical documents attached as Exhibit B and Exhibit A to the MG-R(SVR) Certifications for Hi-MD.<sup>7</sup>

**E. The MG-R(SVR) Robustness and Compliance Rules Apply to Sony and its Affiliates**

The MPAA Comments seek clarification from Sony that implementations of MG-R(SVR) by Sony, its affiliates and any others to whom Sony might authorize use of MG-R(SVR) will be subject to an obligation to comply with the Compliance Rules and Robustness Rules “equivalently to any other Adopter licensee of the MagicGate Technology.”<sup>8</sup> As the MPAA Comments note, Sony and its Subsidiaries are obligated under Section 12.1 of the Content Participant Agreement to ensure that their hardware and software implementations comply with the Compliance Rules and Robustness Rules then in effect for Hardware licensees. Sony hereby clarifies that it will not license or authorize the use of any Licensed Patents (as defined in the MG-R(SVR) Adopter Agreements) for use in products that are interoperable with Licensed Products (i.e., products that interoperate with MG-R(SVR) for Memory Stick PRO or MG-R(SVR) for Hi-MD), except where such products are required to comply with the Compliance Rules and Robustness Rules then in effect for hardware licensees. Such clarification applies, among others, to affiliates of Sony, if any, that do not fall

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<sup>6</sup> MPAA Comments at 5.

<sup>7</sup> See “MagicGate Type-R for Secure Video Recording for Hi-MD Specification -Informational Version”: Sections 6.1.2 (Encryption), 6.2.3 (Decryption) and 5.3 (Relation between a DNK and an EKB File) and “MagicGate Type-R for Secure Video Recording for Hi-MD Technical Guidance Document”: Sections 3 (Requirements for MG-R(SVR) for Hi-MD Compliant Media) and 12 (Propagation of EKB File to revoke illegitimate devices/software).

<sup>8</sup> MPAA Comments at 6.

within the definition of “Subsidiaries” and to third parties, if any, to whom Sony may “contribute MagicGate intellectual property” as contemplated by the MPAA Comments, if Licensed Patents will be used by such entities for products that are interoperable with Licensed Products.

#### **F. Handling of Revocation Lists**

The MPAA Comments state that “in order to effectuate revocation, it is necessary that a standardized means for delivering revocation information in the ATSC transport stream is developed.”<sup>9</sup> Sony points out, however, that an effective means for carrying and propagating MG-R(SVR) revocation information is already included in the MG-R(SVR) specifications and that the MG-R(SVR) revocation mechanisms are not dependant on the ATSC stream to carry revocation information. As described in the MG-R(SVR) Certifications, MG-R(SVR) revocation information is passed from product to product by means of exchanges of revocation information between MG-R(SVR) compliant hardware/ software products and media.<sup>10</sup>

#### **G. Relationship between Interim and Final Certification Processes**

In their “Comments Pertinent to All Filings for Interim Certification,” the MPAA seeks Commission guidance on the relationship between “interim” approval and “attainment of or retention on the final list or schedule of approved technologies.” Sony urges the Commission to reject any implication in such question that technologies approved by the Commission for use with Covered Demodulator Products pursuant to § 73.9008 may need to be re-certified, or subjected to additional approval criteria, pursuant to procedures that the Commission may later adopt pursuant to the FNRPM.<sup>11</sup> Once the Commission issues a determination that a digital output protection technology or recording method is approved for use with Covered Demodulator Products pursuant to § 73.9008(b)(3), manufacturers will make long-term investments in product planning and design, and

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<sup>9</sup> MPAA Comments at 6.

<sup>10</sup> See MG-R(SVR) Certifications at 7.

<sup>11</sup> *In the Matter of Digital Broadcast Content Protection*, MB Docket No. 02-230, *Report and Order and Further Notice of Proposed Rulemaking*, 18 FCC Rcd 23550 (2003) (“Report and Order” and “FNRPM” as appropriate).

consumers will similarly invest in products capable of receiving or playing Broadcast-Flag-protected DTV content. Having made such investments on the basis of the Commission's determination that the technologies are in fact suitable for use with Covered Demodulator Products, it would be manifestly unfair to both manufacturers and consumers if the Commission were to apply different criteria to those same technologies, potentially orphaning legacy products and/or requiring substantial time delays and costs for product redesign. Moreover, the threat of such possibility would create a disincentive for manufacturers to incorporate approved content protection technologies prior to the effective date of the Broadcast Flag regulation, as encouraged by the Commission in the Report and Order.<sup>12</sup>

Sony recognizes that in certain limited circumstances where a content protection technology or recording method has been "compromised," the Commission's approval may be revoked pursuant to § 73.9008(e). For the foregoing reasons, Sony urges the Commission not to expand the scope of circumstances in which the Commission would take such extraordinary steps.

## **II. REPLY TO COMMENTS OF GENESIS**

Genesis Microchip, Inc. ("Genesis"), in its comments to the MG-R(SVR) Certifications ("Genesis Comments"), asks the Commission not to approve the MG-R(SVR) Certifications unless it requires disclosure of patents and pending patents licensed under the MG-R(SVR) agreements. In support of such request, Genesis argues why, in its view, its proposed licensing approach is preferable to the approach adopted in the MG-R(SVR) licenses whereby rights are granted with respect to all claims owned by the licensor necessary to implement a specification (a "necessary claim" approach). Notably, however, Genesis does not claim in its comments that the "necessary claim" approach adopted in the MG-R(SVR) hardware licenses in any way fails to satisfy the factors identified by the Commission in its interim approval procedures.<sup>13</sup> Nor does Genesis argue that a "necessary claims" licensing approach is in any respect unlawful. While Sony appreciates that an individual company

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<sup>12</sup> See *Report and Order* at ¶ 57.

<sup>13</sup> 47 C.F.R. § 73.9008.

may, as a matter of corporate policy, prefer one type of license approach over another (e.g., specific patents over necessary claims, or visa versa), such preferences, should not, in Sony's view, be mandated by the Commission, particularly in the absence of any credible claim that the applicable certification fails to provide evidence that the technology is licensed on a reasonable, non-discriminatory basis, as required by the Commission.<sup>14</sup>

Sony urges the Commission to preserve each licensor's flexibility to offer technologies on such reasonable (i.e., lawful) and non-discriminatory terms as the licensor deems appropriate in light of private negotiations, licensee demand and other market forces.

With respect to the Genesis Comments, Sony points out as a threshold matter that the comments are entirely inapplicable to the MG-R(SVR) software certifications, which apply to proprietary software implementations that are not licensed under any terms. Sony therefore respectfully suggests that the Genesis Comments should be disregarded with respect to dockets 04-56 and 04-57.

The MG-R(SVR) licenses, including the rights granted to "necessary claims," are pro-competitive, reasonable and non-discriminatory. In that regard, we note the following:

- Sony covenants, on behalf of itself and its Subsidiaries, not to assert against an adopter patent claims that necessarily must be infringed to implement MG-R(SVR) or any trade secrets or copyrights embodied in the specifications.<sup>15</sup> Adopters are thereby assured that all patent claims of Sony and its Subsidiaries that are necessary to implement the specifications (as well as trade secrets and copyrights) are included in the rights granted to licensees, including claims covered by patents that may be issued to Sony after the date of execution of the agreement.
- The MG-R(SVR) "necessary claims" approach recognizes that content protection is not a feature consumers are typically willing to pay for. Accordingly, the MG-R(SVR) technology is made available on a cost-recovery basis, well below commercial royalties rates. If Sony were required

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<sup>14</sup> *Id.*

<sup>15</sup> See Section 2.01 of the respective Memory Stick PRO and Hi-MD Adopter Agreements.



to review its vast portfolio of issued and pending patents and identify all specific claims covered by the specification, it would incur substantial additional costs that would need to be passed on to licensees (and presumably then on to consumers). Such costs would be compounded by the need for ongoing patent review as Sony and its Subsidiaries acquire additional patents.

- In partial consideration of the rights granted to licensees, each licensee agrees not to assert necessary claims against other licensees for the implementation of MG-R(SVR) in licensed products. Such an approach establishes for all licensees a “safety zone” in which all who choose to participate benefit from low costs and minimized intellectual property risks. If Sony were required to incur the substantial cost and burden of reviewing its patent portfolio to determine which patents include necessary claims, licensees would presumably also be required to do so with respect to their grant-back non-assertion covenants, thereby incurring substantial costs that would presumably also be passed on to consumers.
- Each Adopter Agreement and Content Participant Agreement is offered on a nondiscriminatory basis (i.e., on the same terms) to all licensees.
- Licenses granting rights to “necessary” (or “essential”) claims without enumerating patents are common in the content protection arena, including, for example, in the case of CSS, CPRM, HDCP and DTCP. The latter two technologies are authorized output technologies under the DFAST license endorsed by numerous consumer electronics manufacturers and cable companies, and approved by the Commission, in the Plug & Play proceeding.<sup>16</sup> If the FCC were to deny all certifications that failed to enumerate licensed patent claims, many, if not most, of the certifications pending before the FCC would be denied.<sup>17</sup>

In contrast to the above-noted benefits of the “necessary claims” approach, the changes

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<sup>16</sup> *In the Matter of Implementation of Section 304 of the Telecommunications Act of 1996*, CS Docket No. 97-80; *Commercial Availability of Navigation Devices, Compatibility between Cable Systems and Consumer Electronics Equipment*, PP Docket No. 00-67.

<sup>17</sup> Genesis appears not to have filed comments objecting to the other certifications that do not disclose licensed patents.

proposed by Genesis would result in significant increases in costs to licensees and consumers without any material net benefit to licensees. Indeed, it is unclear how Genesis' proposed requirement that specific patents be disclosed would address the underlying business concern that Genesis identifies. Even if Sony were to undertake the considerable time and expense to identify all patents and patent applications that cover "necessary claims," such patents would likely include claims beyond those necessary to implement the specification and would therefore not be included in Sony's or its adopters' non-assertion covenants. Further, the scope of any given patent application will not be fixed until the patent is finally issued. It would not be possible to know (a) whether a patent application that at the time of disclosure was considered to contain a "necessary" claim, would, when issued, still contain such claim, or (b) whether a patent application that was not expected to include a "necessary" claim at the time of application would ultimately include such a claim. As such, an enumeration of patents and patent applications would not affect the adopter's determination of what is or is not necessary to implement the specification. Relatedly, its proposal that a licensor identify specific claims from within a patent or patent application, would require further effort and cost (that would be passed on to consumers) and require a licensor to take the unusual step of disclosing claims in pending patents.

While Sony believes that most licensees will benefit from the "necessary claims" approach adopted in the MG-R(SVR) agreements, Sony recognizes, that, as with all license terms, a particular company such as Genesis may prefer a different approach. For the reasons noted above, however, Sony respectfully submits that licensors should retain the flexibility to choose from among all such lawful approaches.

### **III. CONCLUSION**

For the foregoing reasons, Sony believes that no obstacles stand in the way of the FCC issuing a determination that the MG-R(SVR) technologies are approved for use with Covered Demodulator Products.

Respectfully submitted,

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